

Please add the following:

Abstract

A quick-action cylinder with safety device to prevent blocking is described, wherein the quick-action cylinder provides a mechanical lock for a center draw-in nipple (2) in a center bore (23) in a housing of a quick-action cylinder, wherein in the locked position one or more locking members (3) are urged into contact with an exterior periphery of the draw-in nipple by a force of a spring assembly (12) which is arranged in the housing in one or several spring compartments (13), and wherein the unlocked position of the draw-in nipple (2) is attained by applying pressure to a locking piston (7) which operates to oppose the force of the spring assembly. The safety device prevents self-blocking of the locking device of the draw-in nipple (2) in the center bore (23) when the pressure medium enters the spring compartment (13) of the spring assembly (12) from the cylinder space (11) of the locking piston. For this purpose, a relief bore (15; 25; 26) is disposed in the spring compartment (13), extending to a lower-pressure clearance space (19). One or more pressure elements (16; 21; 24; 27) are arranged in the region of the relief bore which are brought into an open position in the event of an overpressure in the spring compartment (13), thereby discharging the pressure medium from the spring compartment (13).